

TOTAL ORGANIC CARBON, Persulfate-Ultraviolet Oxidation Method
SM 18th, 20th, 21st ED 5310 C

Facility Name: _____ VELAP ID: _____

Assessor Name: _____ Analyst Name: _____ Inspection Date: _____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Is a method blank and LCS analyzed at a frequency of 5% per matrix type or per sample extraction (18 th ED) or 10% per 20 th /21 st ED?	18 th 1020 B.4 20 th 5310 B.6 21 st 5310 B.6				
Is a matrix spike duplicate (MSD) or a laboratory duplicate performed at a frequency of 1 in 20 samples, or one per sample batch, whichever is more frequent?	SM 1020 B.6				
Are samples collected in amber glass bottles?	1.d				
For nonpotable water, are samples held at ≤6°C unless analyzed the same day as collection?	40 CFR 136.3 Table II				
For nonpotable water, if samples are not analyzed the day of collection, are they preserved with H ₂ SO ₄ , HCl, or H ₃ PO ₄ to pH < 2 and analyzed within 28 days?	40 CFR 136.3 Table II				
For drinking water, are samples acidified at the time of collection to pH ≤ 2 with minimal addition of the acid specified in the method or by the instrument manufacturer and analyzed within 28 days?	40 CFR 141.131(d)(3)				
Are samples homogenized if they contain gross particulates or insoluble matter?	4.b				
For preparation of reagents, blanks, and standards, does reagent water have a TOC value less than 2 times the MDL?	5310 C.3.a, 5310 B.3.a				
Is the inorganic efficiency checked by adding inorganic carbon NaCO ₃ to a portion of the sample and checking agreement with non-added inorganic carbon sample? [This does not apply to 18 th Edition.]	20 th , 21 st 5310 C.4.b				
Are samples and standards manually injected repeatedly until consecutive peaks are reproducible to within +/-10%.	4.c				
Is the peak area (not height) determined for each standard and the blank?	4.d				
Are peak areas of the standards and samples adjusted by subtracting the reagent water blank?	4.d				
Notes/ Comments:					